

# EFFICIENCY OF FACIAL NERVOUS NEUROPATHY THERAPY BY REFLEXOTHERAPY METHOD IN UZBEKISTAN

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**Abstract:** Optimal terms and courses of treatment of patients with neuropathies of the facial nerve of different severity were studied. Complex treatment of facial nerve neuropathies was carried out using reflexotherapy (acupuncture). According to the results of the study, the optimal dates and number of courses were determined. The method of reflexotherapy is more effective in the treatment of patients in an earlier period of the disease. With long-term neuropathies, it is necessary to conduct five or more courses of reflexotherapy. The effect of treatment depended on the duration of the disease and the time of onset of treatment.

**Keywords:** neuropathies, facial nerve, reflexotherapy.

## INTRODUCTION

Diseases of the nervous system are currently a significant medical and social problem [1, 2, 3]. The neuropathy of the facial nerve remains a topical issue of neurology, due to the high prevalence, clinical course and its consequences, which in many respects reduces the quality of life and negatively affects the psychoemotional sphere of patients [4]. Data are presented that the prevalence of facial nerve neuropathy is 13-24 cases per 100 thousand population [5]. Lesion of the facial nerve is the most common problem in neurology, which leads to persistent aesthetic defects, manifested primarily in the form of asymmetry of the face [6].

The most common causes of irritation of the nerves or their autonomic ganglia are inflammation, trauma and compression [7]. It is assumed that the damage to the facial nerve is associated with a viral infection, as well as factors contributing to the development of the facial nerve neuropathy include: hypothermia, increased blood pressure, inflammatory diseases of the ear and throat. A relatively common cause of nerve damage in dental practice is anesthesia of the lower alveolar nerve [8].

In neurology, various methods of treating the neuropathy of the facial nerve are used, including medication and physiotherapy: the electric field of UHF, the alternating magnetic field, electrostimulation, ultrasound, thermal therapy, therapeutic physical training [9, 10].

When treating with traditional methods, the recovery of facial nerve function occurs in 40-60% of cases, therefore, the search for effective treatment of facial nerve neuropathy continues [11, 12].

One of the recognized methods of treating facial nerve neuropathies is reflexology, which has a minimum of contraindications and has no side effects [13, 14]. Modern reflexotherapy is an effective method of treatment that improves the quality of life by affecting the central nervous system, neurohumoral, endocrine and immune systems.

Acupuncture points are biologically active points in the form of small areas of skin and subcutaneous tissue, in which there is a complex of interconnected microstructures (vessels, nerves, cells of connective tissue) [15, 18].

Effective work of reflexotherapy is based on the impact of needles on acupuncture points of different depths, taking into account the different angle of inclination, exposure time and the method of extraction of needles, which is usually important for selective effects on individual organs and systems [16, 17].

**Purpose of the study.** Determine the optimal timing and treatment courses for patients with neuropathy of the facial nerve of varying severity.

**MATERIALS AND METHOD**

The patients were examined at the clinic of the Bukhara State Medical Institute from 2014 to 2017. 113 patients took part in the study. The diagnosis of the facial nerve neuropathy was exhibited in the presence of characteristic complaints, anamnesis, objective examination data and examinations. The duration of the disease was from 3.9 to 44.5 days.

In accordance with the degree of dysfunction of the facial nerve, three groups were distinguished: group I of the surveyed was 62 (54.87 %) patient, group II - 34 (30.08 %), group III - 17 (15.04 %). House Frontman (1985) was used to reveal the degree of dysfunction of the facial nerve. The distribution of groups on a scale is presented in Table. 1.

**Table 1**

**Distribution of groups according to the House-Brackman scale (1985)**

Point	Appointment	Group
1	Normal	I group
2	mild dysfunction	
3	moderate dysfunction	
4	mild-severe dysfunction	II group
5	Severe dysfunction	III group
6	Complete paralysis	

The distribution of men and women by group was, respectively: in Group I - 25 and 37; in the II group - 14 and 20; in the III group - 8 and 9.

The age of the patients was comparable for all groups: 37 ± 6.4 years (group I), 38 ± 6.9 years (group II), 34 ± 6.8 years (group III).

Diagnostics of patients included the collection of anamnesis, facial analysis in the static position, mimic assays, assessment of reflexes, degree of asymmetry and photo documentation. Instrumental methods - EMG (electromyography) and MRI of the brain were performed.

Reflexotherapy was prescribed against the background of the basic drug therapy - anti-inflammatory drugs (glucocorticoids, non-steroidal anti-inflammatory drugs); decongestants (furosemide, lasix, diacarb); antispasmodic; vasodilators (preparations of nicotinic acid, L-lysine escinate, espolipon); analgesics; vitamins of group B.

The following scheme of reflexotherapy was developed: each course consisted of seven procedures performed daily, the second course was

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administered five after the first, the third - 10-14 days later, the 4th - after 21-30 days, the subsequent courses were repeated, if necessary 45-60 days.

For reflexology, peripheral points of acupuncture were used, which were on the hands, feet, and local points on the face. The exposure time of the needle was 20-25 minutes at the distal points. The points were used on the face by an exciting technique for 1 to 5 minutes; the exposure time was increased with each subsequent course. Acupuncture points in the treatment of facial nerve neuropathies are presented.

## RESULTS AND DISCUSSION

Clinical examination of Group I patients showed that 62 patients had mild dysfunction of the facial nerve, in which barely noticeable syncopeesis and slight asymmetry of the mouth were detected with a smile. Moderate dysfunction in 34 patients was characterized by pronounced asymmetry and noticeable synkinesis, mild asymmetry of the mouth was noted with a smile. Patients noted mild paresthesia in the ear. The motor functions of the muscles with the eyes squeezed, raising the eyebrows and wrinkling of the forehead persisted, but with less force than on the healthy side. The mouth was barely noticeably stretched to the healthy side. The patient could inflate his cheek, but with less force than with a healthy opposite side. In 74 patients of the II group, signs of severe asymmetry of the face and mouth at rest were found, pronounced syncopeesis and spasms were found, which corresponded to the average degree of dysfunction. Patients complained of moderate pain and paresthesia in the ear and mastoid process, a decrease in the function of lacrimation, a disorder of taste and salivation. Inflammation of the cheek from the affected side was weak; patients could not whistle. Attempt to close the eye led to incomplete closure, with a visible strip of sclera in 1-2 mm. The wrinkling of the forehead and the frowning of the eyebrows were insignificant.

In group III, 10 of the subjects had severe dysfunction, with weak movements of the corner of the mouth, patients could not close their eyes, in general the movements on the affected side were barely noticeable. In seven patients, total dysfunction was diagnosed with complete lack of movement and decreased muscle tone. Reduction of tearing in patients was accompanied by the appearance of xerophthalmia, complaints were expressed about the lack of taste and salivation. The attempt to inflate the cheek was weak; patients could not whistle; the eye was not completely closed - a strip of sclera in 3-5 mm was visible. The wrinkling of his forehead was barely noticeable. There were minor movements when trying to frown your brows.

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Analysis of treatment results showed that the introduction of two courses of reflexotherapy in Group I led to recovery in 94.5% of patients with complete recovery of facial nerve functions.

In Group II 68.2% of patients underwent reflexotherapy during 2 courses and 23.7% - three. In Group III, less than a third of patients (28.3%) responded positively to two courses of reflex therapy, 47.1% - 3 and 3.9% - four courses or more.

It should be noted that complete recovery did not occur in 5.3% of patients in Group I, in 8.5% in Group II and in 20% in Group III.

### CONCLUSIONS

1. Acupuncture is an important part of the complex treatment of facial nerve neuropathies. The proposed treatment regimen makes it possible to optimize the rehabilitation of the neuropathies of the facial nerve on the basis of the myotonizing (restoring the functions of the affected mimic muscles), myorelaxing, analgesic, sedative and immunomodulatory effects.

2. Early application of acupuncture (within 1-30 days) showed the best results in the form of restoration of impellent deficit of mimic muscles.

3. With a small prescription of the neuropathy of the facial nerve, reflexotherapy on average with 2-3 courses led to a rapid recovery of lost functions.

4. With a longer form of facial nerve neuropathy with severe lesion of grade 4-6 (H-S scale), after 150 days from the moment of the disease, the number of treatment regimens with reflexotherapy can increase up to 6-8 courses with partial restoration of facial nerve functions. It is necessary to continue treatment taking into account the timing of the appointment of repeated courses of treatment. There is a recovery of motor defects of facial muscles after five months (150 days) from the onset of the disease.

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